INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(54) Title: DATA SWITCHING METHOD AND APPARATUS
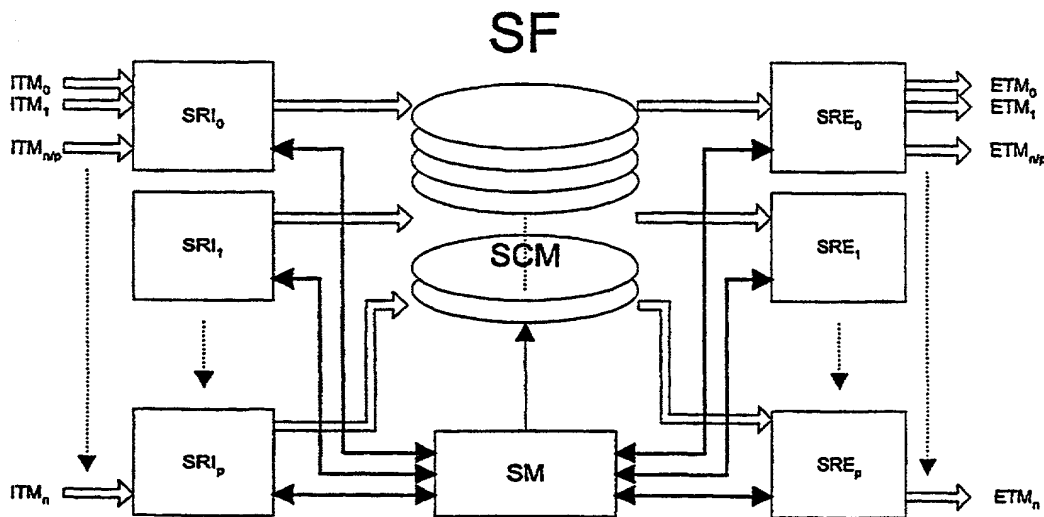
(57) Abstract

A data switch for handling packets of information switch comprises input traffic managers, ingress routers, a memoryless cyclic switch fabric, egress routers and output traffic managers all acting under the control of a switch controller. Each ingress router includes a set of virtual output buffers one for each output traffic manager and each message priority. Each data packet or cell as it arrives is examined to identify the output traffic manager address and its message priority. The switch controller uses a first arbitration and selection process to schedule the passage of the next cell across the switch fabric which the ingress router uses a second arbitration and selection process to select the appropriate virtual output queue for use in the switch fabric transfer.